

AMENDMENTS TO THE SPECIFICATION

Page 4

Please **replace** the paragraph commencing on line 22 with the following amended paragraph:

--Assuming that M represents the mutual inductance between L_1 and L_2 , $L_1 = L_2 = M$

$$V = (Z_1 + j\omega L_1) \cdot j_1 - j\omega \cdot M \cdot j_2 \dots 1$$

$$V = (Z_2 + j\omega L_2) \cdot j_2 - j\omega \cdot M \cdot j_1 \dots 2$$

From the equations 1 and 2,

$$\{Z_1 + j\omega (L_1+M)\} \cdot j_1 - \{Z_2 + j\omega (L_2+M)\} \cdot j_2 = 0 \dots$$

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Please **delete** the drawing immediately above the paragraph commencing on line 5.

Please **replace** the paragraph commencing on line 16 with the following amended paragraph:

--Further, in these proposals, the impedances of the cold-cathode fluorescent lamp are regarded as pure resistances based on a theory shown by the above equation and **figure Fig. 20**. More specifically, the impedances are determined by the VI characteristic (voltage-current characteristic) of the cold-cathode fluorescent lamp, and regarding the impedances as pure resistances, a reactance sufficiently larger than the impedances of the cold-cathode fluorescent lamp is set, whereby variation in the impedances of the individual cold-cathode fluorescent lamps is corrected.--

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Please replace the paragraph commencing on line 7 with the following amended paragraph:

--To cope with the above problem, in the multi-lamp lighting circuit, as shown in Fig. 16, a method of shunting the output of the step-up transformer on the secondary winding side using capacitive ballasts is generally employed. However, the circuit for shunting the output of the step-up transformer using the capacitive ballasts is a simplified circuit, but suffers from the following various problems, which will be described hereinafter with reference to Fig. 13_16.--

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Please replace the paragraph commencing on line 17 with the following amended paragraph:

--Even when shunt transformers are arranged on the high-voltage side, the shunt transformers can be arranged in the form of a tournament tree, more specifically, by winding two windings of coils of each shunt transformer such that magnetic fluxes generated by said respective windings are opposed to each other, and connecting one ends of the windings to each other, with each of the other ends of said two windings other than the one ends connected to each other being connected to one ends of two windings of another shunt transformer, the one ends being connected to each other, whereby shunt transformers are sequentially connected to each other to form a multi-tier or pyramid-like structure. Therefore, it is easy to make the length of high-voltage wires equal to each other, and possible to dispose the cold-cathode fluorescent lamps in the vicinity of the shunt ~~transformed~~ transformer, so that the influence of the parasitic capacitance can be reduced.--

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Please replace the paragraph commencing on line 27 with the following amended paragraph:

--Fig. 21 is a diagram useful in explaining the structure of an oblique winding, which is an example of a ~~conventional~~-winding;--

Please replace the paragraph commencing on line 30 with the following amended paragraph:

--Figs. 22a-22f is a-are diagrams which is-are useful in explaining the construction of a shunt transformer having obliquely-wound windings, according to the present invention;--

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Please replace the paragraph commencing on line 2 with the following amended paragraph:

--Further, by combining the present invention with an oblique winding method shown in Fig. 21, which is disclosed in U.S. patent No. 2002/0140538, Japanese Patent No. 2727461, and Japanese Patent No. 2727462, it becomes possible to increase the self-resonance frequency of the windings, and make the shunt transformer very small in size, as shown in Figs. 22a-22d. This is because this winding method has not only the feature that the leakage flux between the windings formed thereby is smaller than that occurring with windings formed by sectional winding, but

also the feature that the winding is more excellent in binding property and smaller in the leakage flux within itself. Therefore, it is possible to reduce leakage flux although the shunt transformer has a narrow and deformed shape. As a consequence, it is possible to further reduce the size of the shunt transformer, and thereby further enhance the effect of reduction of heat which is to be generated when the core is saturated.--

After the paragraph commencing on line 2, please **insert** the following new paragraph:

-- Figs. 22e and 22f show diagrams of the shunt transformer implemented in Figs. 22a-22d. As shown in Fig. 22e, the end 1 of one of the coils and the end 3 of the other coil are connected to a contact point 5, respectively. Each of the other ends 2, 4 of the coils may be connected to each discharge lamp, respectively. However, in an exemplary embodiment utilizing multiple stages of shunt transformers, the each of the other ends 2, 4 of the coils of the shunt transformer may be connected to a contact point 5 of shunt transformers in the next stage, respectively.--